

(2) this additional annual sum of 2s. 9d., for this sum, as has been shown, is the yearly equivalent during the term of the extra amount to be actually received at the end. These two together amount to £3 2s. 9d. for the purchase price of £95, and reduced to a return per cent (as £100 is to the actual rate yielded, so is £95 to £3 2s. 9d.) the total return is ascertained to be £3 6s. per cent upon the money he has invested, instead of £3 3s. 4d. In this mode of considering the result of the investment it will be observed that the holder has taken into actual account the *annual* equivalent of his ultimate bonus, and must accordingly in this manner of survey remember that for the £95 expended (yielding him £3 6s.) he is only to regard the receipt of £95 upon redemption. He will as a fact obtain £100, but £5 of it has been used up in this mode of reckoning; in other words, this method of consideration gives him a final refund of the £95 he has actually invested, and an income meantime at the rate of £3 6s. per cent, per annum.

A clearer plan would be to suppose that he sold to some person the right to the bonus of £5. At 3 per cent., the present value he would receive would be £2 7s. 9d.; and laying out this sum in the purchase of an annuity enduring for the twenty-five years, he obtains each year the sum of 2s. 9d., as in the preceding calculation. The same result is thus arrived at. As previously computed, apart from the bonuses, the investor receives £3 3s. 4d per cent.; adding the equivalent annuity in respect of the reversionary £5, or 2s. 9d., we obtain the complete return shown of £3 6s. Or he may regard his position in another way. He has invested £95; the sum of £5 is worth in present value £2 7s. 9d.: hence he will receive his capital of £95 intact when the bond is redeemed, and he also possesses a permanent additional capital of £2 7s. 9d., which he can apply to productive uses.

But assume that instead of Buying the bond at a discount he purchased at a premium : let him give £105, where he loses £5 on each £100 of the bond on redemption. It is not likely that this price would be paid where the bond only bore a rate of 3 per cent. We accordingly presume that the rate attached is 3½ per cent. The bond is again assumed to be repayable on the expiration of twenty-five years from the date of purchase.